Meeting Minutes
MINERvA Working Group Meeting (WGM)
Wednesday, August 10, 2005
1:30 pm Snake Pit

Attendees: *E. Temple, D. Harris, D. Boehnlein, D. Hoffer, S. Webster, G. Bock, K. McFarland, J. Butler, G. Rameika, N. Grossman*

New Action Items:

1. *Dave to get updated PMP to Ed, Dean etc. once MINERvA PM has completed reviewing it.*
2. *Dave to start drafting PEP.*
3. *Add G. Rameika and J. Butler to this meetings distribution list.*
4. *Project to update MOU/SOW templates to address issue of contingency (see agenda item 2).*
5. *The Project needs to put physicists (both at Universities and FNAL) explicitly in the schedule so that resource needs at FNAL and individual universities are understood. It has been done to some extent, but not completely.*
6. *Steve to check with HEP on the requirements for reporting on an under 5M$ project and get back to MINERvA management.*
7. *Mont to come up list of membership for the PMG.*
8. *Mont to name PM, deputies etc.*
9. *PM to meet with Mont/Greg to discuss under 5M$ scenario.*
10. *Ed, Dean to set up next meeting.*

Agenda & Minutes:

1) Present and discuss Dave's Updated Draft Project Management Plan (Dave and All)
   - Dave has updated the draft document and it is now being reviewed by MINERvA project management. Dave has some questions about removing references to a "baseline" as suggested by Mont since a baseline requires CD2. There was some confusion as to what Mont really meant. People generally thought:
   - PMP can (and should) reference a baseline, but one whose numbers or specifics are all in an appendix so that they can be updated
   - PMP should be on managing the $10M project
   - PEP should be on managing the $5M FNAL MIE
   - PEP should shoot for 5-10 pages, look at FESS generic PEP as may help
   - Dave has drafted a Project categorical exclusion form for review by PM before sending to ES&H Section for comment.
2) Discuss contingency and what goes in the MOU/SOW (Ed)

- Contingency is owned by project, but still need to follow change control process.
- Contingency should not be included in the MOU. If work costs more than estimated in the MOU, then only need to change the SOW. Need to check that there are words in the MOU to allow this to be the case.

3) Present and discuss another MINERvA with TEC < $5M scenario (Nancy and Others)

- Need to add ~30% of detector procurement/construction to R&D prototyping & production optimization to get to ~4.2M$ MIE (includes a flat overhead of 5% and contingency)
- Note the project is revisiting costs & contingency now and hopes to have updated costs by mid October.
- The project will update this plan of under 5M$ MIE as we get updated costs/tasks.
- I&I: Installation and Infrastructure can be off project. This is obvious for general infrastructure work. For installation, the project is defined as the detector being ready to install, but not including installation as that effects operations and is not in control of the project. This is what was done for the CDF/D0 upgrades. We don't want CD-4 contingent on accelerator operations.
- The 5% flat overhead assumed is probably less on the MIE part and more on the I&I part.
- R&D is greater than MIE portion. Is this OK? Yes, that is the way projects are heading. R&D funds are being used through out the life of the project as there is even R&D often needed in support of construction.
- FNAL supports the ~$10M dollar MINERvA project and will do all it can to that end.
- The coil is the least important part of the detector for physics and can be added as an upgrade and has been costed as such in this plan.

4) Status of Other Action Items from 27-July meeting
   a. Dave to incorporate comments on PMP into present PMP draft. See agenda item 1.
   b. Steve to check with HEP on the requirements for reporting on an under 5M$ project and get back to MINERvA management. Steve will do this now that we have an under 5M$ scenario hat is "reasonable".
   c. MINERvA project management to meet with G. Bock & R. Plunkett to talk about 3.5-4M$ packaging of MINERvA. (Done on 7/28.)
   d. Suzanne to get Mont's and CD person's signatures on present MOU/SOWs as needed. (Mont's signatures were given on 7/28, Suzanne in contact with Bob Tschirhart for CD.)
   e. MINERvA project management to work with FNAL management to determine signatures needed on future MOU/SOWs (namely construction ones).
      - R&D: MOU signed by Strait, Mont, Bob T. (CD if needed)
        SOW signed by Strait

OK to continue this way with future R&D MOU, SOW

- Const.: MOU/SOW signatures needed will be visited in the future.

f. Ed & Dean & MINERvA project people to add TJ and Suzanne to this meetings mailing list. (Done)

g. Mont to check on under 5M$ that we don't need CD0 and just have one CD Looking at the Office of Science Project Decision/Approval Matrix dated 11/1/04, CD0 is listed as NA or required by Project Management Director (S. Webster).

h. Mont to come up list of membership for the PMG. Next meeting.

MINERvA MIE Under 5M$ draft August 10, 2005, FY05$ with Contingency

		R&D	I&I	Upgrade	MIE	Total	Comments
Totals	**Last Project Meeting (7-27-05)**	**$3,095,110**	**$579,183**	**$415,456**	**$5,405,753**	**$9,495,502**	**R&D: 20% PMTs & OD wedges, 10% PMT testing, construction of optical cable tester, DAQ hardware procurement&testing&computer&run control (I&I?),module mapper construction, veto wall checkout (I&I?)**
							I&I: LV system, quiet power, electronics system integration, strong back fabrication
							Upgrade: coil
Totals	**Most Recent Attempt (8-10-05)**	**$4,285,830**	**$777,134**	**$415,456**	**$4,017,083**	**$9,495,502**	**R&D: 30% of nearly all items procure/fab to R&D (PT & optimization), 30% of PMT procurement & testing**
fraction of items to R&D PT & optimization		0.3			overhead:	$500,000	**I&I:add module installation & alignment, veto wall assembly(small) & installation;strong back procurement (fabrication already here);DAQ computer installation;LVDScable installation & testing & procurement**
PMT buy/test fraction		0.3			**$4,217,937**	**$9,995,502**	**with overhead (5% average) TPC**

NOTE: PT= prototype, I&I= Installation & Infrastructure

Details:

MINERvA MIE Under 5M$ draft August 10, 2005, FY05$ with Contingency

	Name	R&D	I&I	Upgrade	MIE	Total	Possible Change
WBS 1	**Scintillator Extrusion**	**$347,846**			**$446,690**	**$794,535**	**Oc-extruder and its Installation to I&I instead of R&D?= $90K**
Fraction	0.3	$127,627			$319,063	$794,535	move xx% of ID & OD scintillator production (including consumables)
WBS 2	**WLS Fibers**	**$150,637**			**$439,399**	**$590,036**	**Base R&D is PT**
Fraction	0.3	$117,844				$590,036	move xx% of 2.1.4,2.1.5 to R&D: xx% of ID & OD WLS fiber procurement
Fraction	0.3	$16,384				$590,036	move xx% of 2.6.1.1,2.2.1,2.2.2 to R&D: xx% of WLS fibers QC and Prep
WBS 3	**Scintillator Plane Assembly**	**$595,383**			**$952,223**	**$1,547,606**	**R&D includes prototype shipping (not included in other parts), plane production optimization parts and labor, & standard R&D & PT**
Fraction	0.3	$274,851				$1,547,606	move xx% OD and ID plane parts and production to R&D (3.2.2, 3.2.3, 3.3.2, 3.3.3)
WBS 4	**Clear Fiber Cables**	**$191,818**			**$668,454**	**$860,272**	**R&D=PT clear fiber, PT connector procurement & measurements, production test procurement(? 10K), RTV boots, PT cable assembly, construct optical cable tester (22K0**
Fraction	0.3	$55,489				$860,272	R&D=Clear Fiber: ID & OD ODU and Cable Procurement (4.1.4.1-4)
Fraction	0.3	$10,981				$860,272	R&D=Connectors: ID & OD ODU and Cable Procurement (4.2.3.2-4)

Fraction	0.3	$134,066				$860,272	PT: xx% of 4.4.3-5 Cable, ID ODU & OD ODU assembly
WBS 5	**PMT Boxes**	**$105,024**			**$484,988**	**$590,012**	**PMT box PT, Optimization**
Fraction	0.3	$135,336				$590,012	move xx% of PMT box assembly parts & labor to R&D
WBS 6	**PMT Procurement and Testing**	**$244,692**			**$847,056**	**$1,091,748**	**R&D: 20% PMT Procurement, PMT test stand, 10% PMT testing**
Fraction	0.1	$82,418				$1,091,748	add xx% more to PMT Proecurement R&D
Fraction	0.2	$22,399				$1,091,748	add xx% more to PMT Testing R&D
WBS 7	**Electronics and DAQ**	**$713,197**	**$239,932**		**$340,774**	**$1,293,903**	**I&I: LV system, quiet power, electronics system integration; R&D:DAQ Hardware procurement, testing, computer procurement, run control software**
Fraction	1		$28,047				I&I: 7.3.4,5,6,9,11 DAQ Computer installation, LVDS Cable installation & testing & procurement
Fraction	0	$0					R&D: TriP refab, checkout 7.1.1-3
Fraction	0.3	$65,798					R&D: FE Board component procurement & production fraction, CROC production and checkout, 7.1.12,7.1.14,7.2.6,7.2.7
Fraction	1		$0				I&I: LV cable installation
WBS 8	**Frame, Absorbers and Stand**	**$346,924**	**$244,051**	**$415,456**	**$914,287**	**$1,920,718**	**Upgrade: coil; R&D:20% production test of OD wedges; I&I: fabricate strongback**
Fraction	0.3	$30,362					xx% fraction of Procure HCAL Steel, ECAL Pb, US HCAL Graphite (8.5-7)
Fraction	1		$95,200				put strongback procurement (installation strongback) on I&I? (8.1.3), fabrication already there

Fraction	0.3	$215,346					R&D: Production test of 20% of OD Wedges already in R&D, increase by xx% (8.1.4.2)
WBS 9	**Module Assembly and Installation**	**$209,189**			**$311,883**	**$521,072**	**R&D: design & construct mapper, veto wall counter checkout**
Fraction	0.3	$37,155					R&D: xx% of Module fixtures/consumables, module connector fabrication & module assembly
Fraction	1		$74,704				I&I: module installation & alignment, veto wall assembly(small) & installation
WBS 10	**Project Management**	**$190,400**	**$95,200**		**$0**	**$285,600**	**R&D: PT design manager, design manager; I&I:Installation manager; MIE: safety review team**

NOTE: XX% is 30% where the Fraction is 0.3.